

Our ref: KON-1821

Client's ref: P6215-001-0000

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In re Application of: H. KASHIWAGI et al: Art Unit: 1752

Appln. No. :	10/657,661	:	Examiner: T.
Filed	September 9, 2003	:	Che
Title	SILVER SALT PHOTOTHERMOGRAPHIC DRY IMAGING MATERIAL	:	

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DECLARATION

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

S i r:

I, Soc Man Ho Kimura, hereby declare and say as follows:

1. I am one of the named Inventors in this Application and have previously presented Declarations dated March 31, 2006 and July 7, 2006.

2. In the July 7, 2006 Declaration, a photothermographic material made in accordance with U.S. Patent No. 6,090,538 (Arai) was made and tested against photothermographic material of this Application. I am aware of the fact that the Examiner has commented on the tests in the July 7, 2006 Declaration. In order to address these comments, I present this Declaration.

3. I note that the Examiner states that Example 3 of Arai teaches adding the tetrazaindene compound either during nucleus formation or grain growth because, at Column 54, lines 6+, it states that "Thereafter, 0.3 g of 4-hydroxy-6-methyl-1,3,3a,7-tetrazaindene was added...". As one of skill in the art of silver halide material, I am of the opinion that the tetrazaindene compound was added after nucleus formation and after grain growth because the pH of the solution was adjusted to 5 with sodium hydroxide at the same time as adding of the tetrazaindene compound. The pH is adjusted after grain growth. If the pH was adjusted to 5 with sodium hydroxide at nucleus formation or during grain growth, then the silver halide grains would immediately stop growing. Thus, I am of the opinion that Example 3 of Arai teaches adding the tetrazaindene compound after nucleus formation and after grain growth.

4. The Examiner commented that it is unclear how the material R105 was made. To make R105, Example 3 of Arai was followed. First, the silver halide grain B was made using the compounds and procedures as recited at Column 53, line 61 - Column 54, line 16 of Arai. Next, the organic fatty acid silver emulsion B was prepared using the compounds and procedure as recited at Column 54, lines 17-47 of Arai. A back surface coating layer was prepared and coated onto a support made of polyethylene terephthalate, and then dried using the compounds and procedures as recited in Arai at Column 54, lines 44 - Column 55, line 9. On the side opposite the back layer a light-sensitive layer B was coated using the compounds and procedures as recited in Arai at Column 55, lines 10-58. As noted in my July 7, 2006 Declaration, I used R-I-5 as the "Hydrazine derivative" in light-sensitive layer B. In the Table at Column 55, line 17+ of Arai, it states that "Hydrazine derivatives shown in Table 10 (1% methanol solution)" were used in light-sensitive layer B. In Table 1, at the bottom of Column 36, specific hydrazine compounds are disclosed. One of these compounds is referred to as R-I-5. I chose R-I-5 to make light-sensitive layer B because R-I-5 has a formula that falls within formula 1 of the present

Invention. Thus, I was of the opinion that this was closest to the present Invention. Finally, a surface protective layer was coated on to the light-sensitive layer B using the compounds and procedures as recited in Arai at Column 56, lines 1-12. This material was then tested in accordance with the method of this Application on pages 94-97 to obtain the results reported in the Table attached to my July 7, 2006 Declaration.

5. The Examiner commented that this Application contradicts the results in my July 7, 2006 Declaration because Emulsions 1-3 of this Application contained metal dopants inside the silver halide grains and produced a material with a sensitivity inside the claims, while Sample R105 also had metal dopants inside the silver halide grains but produced a material with a sensitivity outside the claim. First, Emulsions 1 and 2 of this Application were prepared with only metal dopants on the inside of the grains. Emulsion 3 was prepared with both metal dopants and an organic, nitrogen containing dopant inside the grains. Sample R105 had only metal dopants inside the grains and an organic dopant outside the grain. Second, Emulsions 1 and 2 were prepared differently than the emulsion of Sample R105. The different methods of preparation between

Emulsions 1 and 2 and Emulsion of Sample R105 resulted in the fact that Emulsions 1 and 2 had a material with a  $S_A/S_B \leq 0.2$  and the emulsion of Sample R105 resulted in a material with  $S_A/S_B > 0.2$ . Thus, because of the different methods used to prepare Emulsions 1 and 2 and the emulsion of Sample R105, the photothermographic material using these emulsions had different  $S_A/S_B$  values.

6. It is declared by undersigned that all statements herein of undersigned's own knowledge are true and that statements made on information and belief are believed to be true; and further that these statements are made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the U.S. Code; and that willful false statements may jeopardize the validity of this Application or any patent issuing thereon.

  
Soc Man Ho Kimura  
Soc Man Ho Kimura

Dated: This 15<sup>th</sup> day of September, 2006.